State of Missouri

2010 Annual State of the State Information Technology Report

Doug Young, Chief Information Officer
Information Technology Services Division (ITSD)
Office of Administration

December 2010

State of Missouri

ITSD

Information Technology Services Division
Office of Administration

Mission: *To support, provide and inspire innovative technology solutions for State of Missouri departments and agencies — with TRANSPARENCY, TIMELINESS, and EFFICIENCY as guiding values in transforming the way we operate and deliver government services to Missourians.*

CIO's Message

In 2010, Missouri was nationally recognized as a leader in the area of technology-savvy governments. The Center for Digital Government released its *2010 Digital States Survey*, announcing Missouri received one of the top grades among the states for demonstrating technology best practices. Clearly, coupled with the Governor's leadership and support, ITSD is committed to transforming the work of state government through innovative technologies.
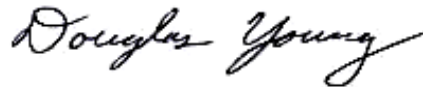
Indeed, technology is critical not only in the day-to-day operations of state government, but to the future and strategic vision of the State of Missouri. Now, more than ever, technology drives successful public business practices and serves as an effective tool to provide cost-effective and valuable service solutions to citizens.

With this in mind, in accordance with Executive Order 06-34, I am pleased to share the *2010 Missouri State of the State Information Technology Report*. Information Technology Services Division (ITSD), Office of Administration, provides technology services and solutions for state of Missouri departments and agencies so they can more effectively and efficiently fulfill their missions.

It is our hope that this report will serve as a valuable review of our mission, history, top statewide IT accomplishments in 2010, as well as a highlight of planned agency projects and initiatives for 2011.

Please refer to this report, as well as our website at www.oa.mo.gov/itsd for the latest ITSD information and services year-round. Moreover, this report is housed on this same website for easy access.

Sincerely,

Douglas Young

Douglas M. Young, Chief Information Officer
Information Technology Systems Division
Missouri State Office of Administration

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2010 National Survey finds Missouri among Top Technology-Savvy State Governments

Missouri uses technology to make government smarter, more efficient

http://go.usa.gov/CYl

The *State of the State Information Technology Report* is an annual review of statewide information technology accomplishments for the calendar year, as well as planned agency projects for the upcoming year for the Missouri State Government information technology (IT) community. The report encompasses all cabinet-level agencies within the consolidated IT environment, as well as other Missouri State Government agencies and offices that choose to participate.

Executive Order 06-34

Executive Order 06-34, signed October 11, 2006, provided for the renaming of the office, from the Office of Information Technology to the Information Technology Services Division (ITSD). This established and recognized the fundamental change of Missouri State Government's IT community to a consolidated structure, better positioned to coordinate and leverage the state's human and technical resources related to information technology.

The order further establishes a Chief Information Officer (CIO), who is designated by the Commissioner of Administration and who serves at the will of the Governor. Key highlights of Executive Order 06-34 give focus and direction for the Information Technology Advisory Board (ITAB), enterprise IT architecture and communication standards, statewide policies, an information technology strategic plan, and the annual *State of the State IT Report.*

Information Technology Consolidation

As a division of the Office of Administration, ITSD's mission mirrors that of the department. It provides technology services and solutions to state departments and agencies so that they can more effectively and efficiently fulfill their individual missions. In essence, ITSD compares to a "utility" company for state government agencies, with utmost responsibility to maximize the state's investment in IT. Similarly, *ITSD Consolidation* is simply an extension of its core mission, and a strategy to achieve the key objectives of reliable, secure and available IT throughout state government.

As of July 1, 2006, all information technology staff, equipment and budgets, with the exception of elected official's offices, the judiciary, agencies governed by commissions as well as the Missouri State Highway Patrol, now fall under the direction of the CIO and are staff of the Office of Administration's ITSD.

This consolidation of IT personnel and resources fundamentally changed the CIO position from a collaborative decision and policy recommending role with the departments to a full budget-authority role with the ability to leverage both human and technical resources for efficient and effective government.

While the initial consolidation revolved around budgets and staffing, beginning in 2009, efforts began to leverage cost savings through combining functions across all the agencies served. No longer does each agency need their own network, their own data center or their own dedicated support staff, etc.

Information Technology Consolidation cont...

With the budget realities the State is facing, further consolidation of services and equipment will provide ITSD the ability to reduce costs while providing the level of support required by those we serve.

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ITSD Directly Supports the Following Agencies:

Department of Agriculture
Department of Corrections
Department of Economic Development
Department of Elementary & Secondary Education
Department of Health & Senior Services
Department of Higher Education
Department of Insurance, Financial Institutions &
    Professional Registration
Department of Labor & Industrial Relations
Department of Mental Health
Department of Natural Resources
Department of Public Safety
Department of Revenue
Department of Social Services
Governor's Office
Lieutenant Governor's Office
Office of Administration

ITSD Provides Services to the Following Agencies & Offices:

Attorney General's Office
Auditor's Office
Department of Conservation
Department of Transportation
Office of State Courts Administrator
Secretary of State's Office
State Highway Patrol
State Treasurer's Office

The following is a list of accomplishments that ITSD achieved in 2010.

Cyber Security

The ITSD Information Security Management Office (ISMO) plays a critical role in protecting the confidentiality, integrity, and availability of information and services delivered by the State of Missouri. From November 2009 through October 2010, there were 156 million malicious attack attempts to State of Missouri systems. In response to the ever-increasing demand for proactive cyber security, below were a few top ISMO priorities and initiatives in 2010:

· Consolidated the administration of content filtering, which protects State computers and ultimately citizen data from malicious individuals. The consolidation not only avoids costs ($20,000 compared to the old system) and saves resources, but also ensures enterprise-wide protection.

· Sent out security tips to all executive department employees on a quarterly basis in order to increase awareness about cyber security and everyone's responsibility in protecting citizen's data. In addition, in efforts to raise application security awareness, a best-practices guide for state web developers and contractors was created.

· Brought online a fully operational computer forensics lab, one of only a few in the entire state. The forensics lab is used to protect and assess data used in internal investigations to recover data.

· Traveled to Washington D.C. to participate in the Department of Homeland Security's Defend the Flag exercise. The exercise was a two-day session, starting with training and finishing with a real world defend /attack scenario. On the offensive side, the Missouri team was the first to successfully attack, and on the defensive side, none of the servers were compromised. The team learned the latest in cyber security penetration techniques and securing servers.

End-User Support
Helpdesk Consolidation

ITSD consolidated end-user support (EUS) and helpdesk functions into one central online helpdesk utility across 12 consolidated agencies in 2010. Previously, each agency hosted separate helpdesk software and end-user support systems, and several paid a monthly maintenance to support such a system. Software savings thus far are estimated at $98,684.

This newly centralized online helpdesk system will allow ITSD staff to calculate more accurate statistics in the future, and as a result better improve support by determining the average time it takes to complete a ticket; estimating how many staff are needed to support state employees across the board; and assessing the primary areas of support needed – whether it be software support, hardware support, etc.

Average ITSD online helpdesk statistics per month:

Average Number of Helpdesk Tickets Processed	**32,349**
Number of End User Support Staff	**275**
Number of State Employees Supported	**53,045**
Number of Computers Supported	**41,398**

End-User Support

Helpdesk Consolidation cont...

Likewise, a Tier I online support line (basic IT support transactions) has also been created to handle all helpdesk calls for the following agencies: Office of Administration, Departments of Agriculture, Corrections, Natural Resources, and Revenue. It also serves as backup support for the Departments of Public Safety, Elementary and Secondary Education, Economic Development, and Insurance. In 2011, a Tier I support system will be rolled out consolidated agency-wide, which will permit around-the-clock staff support – 24 hours a day, seven days a week, year round. Moreover, the recently deployed Unified Communications (UC) Call Center system will help ITSD helpdesk mangers determine the busiest times of the day, and how many staff are needed during the various timeframes to best assist end users remotely through the Tier I online support line system.

MoBroadbandNow

The *MoBroadbandNow* initiative was created by Governor Nixon to coordinate the state's efforts to aggressively compete to bring broadband funding to Missouri in response to the federal recovery bill passed in 2009. Governor Nixon established a goal to increase broadband accessibility from its current level of 79.7 percent to 95 percent within five years.

Accurate data is critical for broadband planning and informing citizens and businesses of the availability of broadband in their area. Most states had little public information regarding broadband availability before American Recovery and Reinvestment Act (ARRA) funding became available. The service map presented on page 7, compiled as a result of a mapping and planning grant to OA-ITSD, shows substantial areas that are underserved by broadband.

The State, through its *MoBroadbandNow* initiative, worked to secure partners with a solid plan, the financial wherewithal, and commitment to ensure a successful project. The federal stimulus bill (ARRA) provided $7.2 billion to expand access to broadband services. In September 2010, the federal agencies completed their awards bringing $261 million for 19 projects to Missouri. The total value of all of these projects including cash and in-kind match is $311 million.

MoBroadbandNow cont...

These projects must be substantially complete within two years, which means that Missourians should begin to reap the benefits of improvements in the near future. As these broadband projects are constructed the broadband service availability map will show improvement.

ITSD played a critical role in the *MoBroadbandNow* effort including identifying and evaluating partners, coordinating among the broadband applicants, and providing technical assistance, financial analysis, mapping assistance, identification of community anchor institutions, and preparation and support of publicity and outreach efforts.

While funding awards have been made and construction begins, there are still many opportunities for citizens and business leaders to be involved in the improvement of broadband access and services in Missouri. The first Missouri Broadband Summit was held in Jefferson City on October 26-27, 2010 as a result of the mapping and planning grant received by OA-ITSD. Approximately 300 people from across the state attended representing citizens, providers, regional groups, and industry sectors.

The Missouri Broadband Summit kicked off a long-term planning effort, funded by the OA-ITSD mapping and planning grant, to ensure continued enhancement of broadband access and ensure that the infrastructure meets the needs of citizens, businesses, and government. Over the next few months, the 19 Regional Planning Commissions across the state will create regional teams including representatives from schools, higher education, libraries, workforce development agencies, the health care sector, industry, local government, economic development professionals, broadband providers, and many others reflecting the area of the state. The teams will help identify the needs as well as strengths in each community.
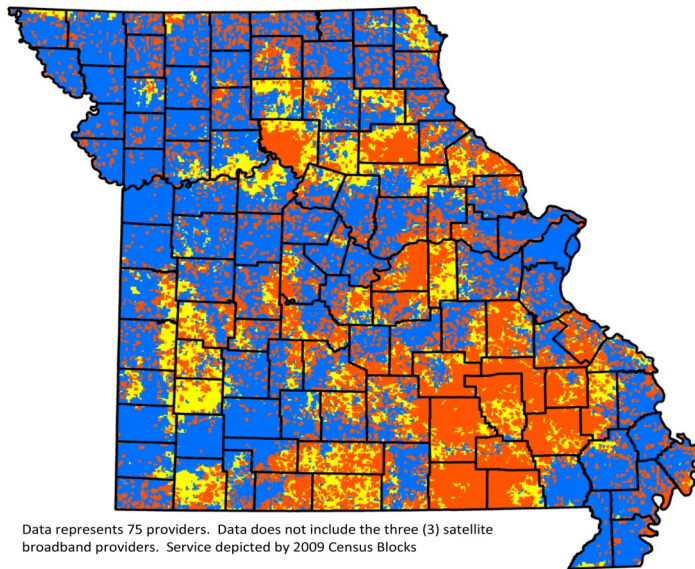
The teams will listen to the voices in their communities, assess the current status of broadband in the area, research and analyze the needs of the community, develop a regional broadband plan, and begin implementation of the plan.

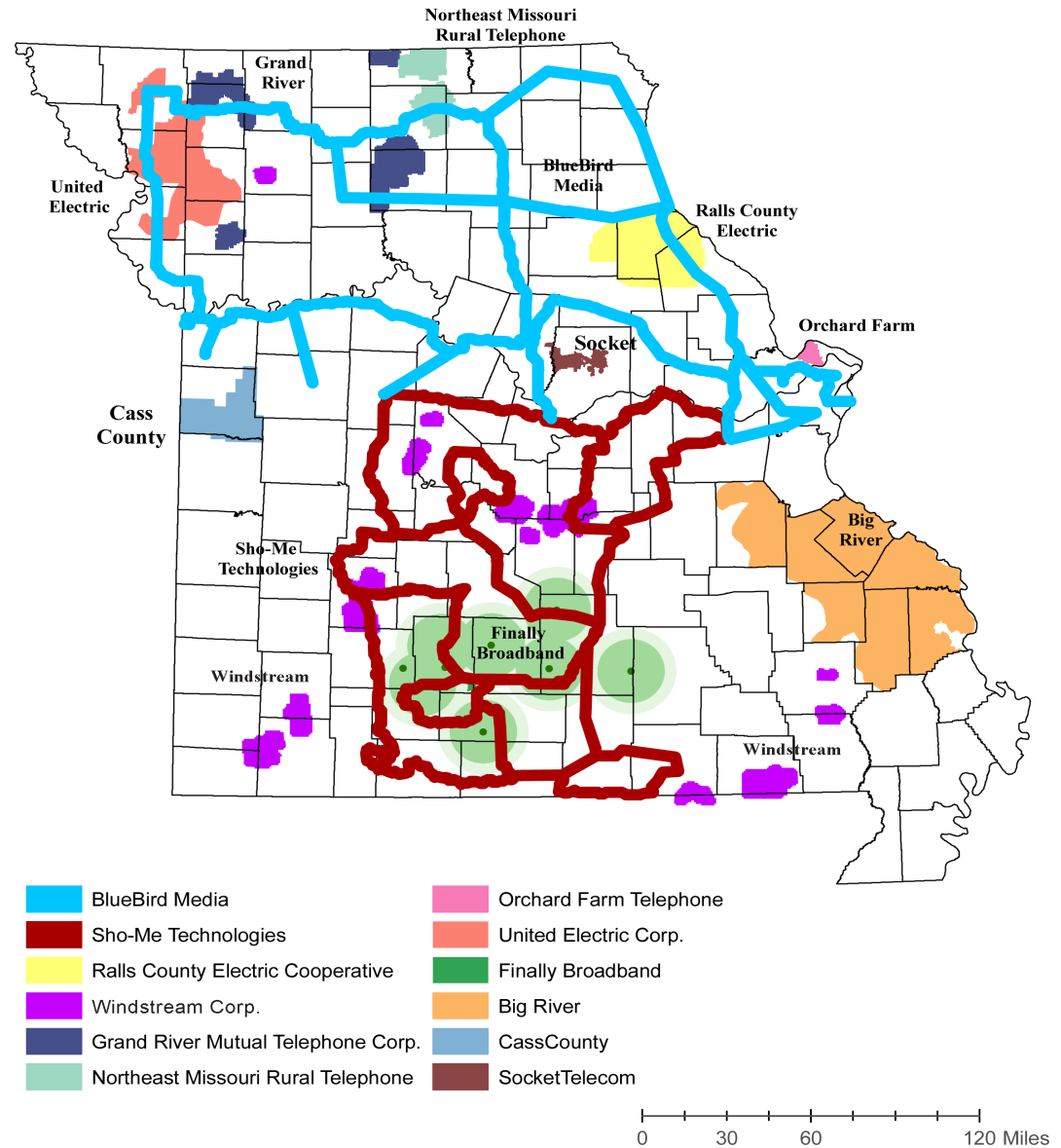See **page 7 for a map** of all Missouri middle and last-mile award winners. See **page 8 for a financial awards chart.**

Block Groups Underserved by Broadband Service

Data represents 75 providers. Data does not include the three (3) satellite broadband providers. Service depicted by 2009 Census Blocks

- 🟧 **Unserved – No Broadband Providers beyond Satellite**
- 🟨 **Underserved – 1 Broadband Provider beyond Satellite**
- 🟦 **Served – More than 1 Broadband Provider beyond Satellite**

Total Missouri Middle and Last-Mile Broadband Awards

Northeast Missouri Rural Telephone

Grand River

United Electric

BlueBird Media

Ralls County Electric

Orchard Farm

Socket

Cass County

Big River

Sho-Me Technologies

Finally Broadband

Windstream

Windstream

- BlueBird Media
- Sho-Me Technologies
- Ralls County Electric Cooperative
- Windstream Corp.
- Grand River Mutual Telephone Corp.
- Northeast Missouri Rural Telephone
- Orchard Farm Telephone
- United Electric Corp.
- Finally Broadband
- Big River
- CassCounty
- SocketTelecom

0   30   60   120 Miles

MISSOURI BROADBAND AWARDS

AWARDEE	FEDERAL AWARD		MATCH		TOTAL ROJECT VALUE
	GRANT	LOAN	CASH MATCH	IN-KIND MATCH	
MOBroadbandNOW AWARDS					
MO Department of Higher Education	$4,978,977	$0	$0	$1,629,359	$6,608,336
BlueBird Media	$45,145,250	$0	$9,158,100	$10,500,000	$64,803,350
Sho-Me Technologies	$26,600,000	$0	$2,600,000	$8,800,000	$38,000,000
Ralls County Electric Cooperative	$9,548,908	$9,548,909	$950,000	$0	$20,047,817
Big River Telephone	$12,190,784	$12,191,271	$5,216,385	$4,325,600	$33,924,040
Socket Telecom, LLC	$16,614,137	$7,120,345	$0	$0	$23,734,482
United Electric Cooperative	$14,849,173	$6,363,933	$0	$0	$21,213,106
Cass County	$18,205,578	$7,802,391	$0	$0	$26,007,969
Finally Broadband LLC	$499,000	$499,000	$1,474,901	$120,000	$2,592,901
SUBTOTAL *MOBroadbandNow* partners	$148,631,807	$43,525,849	$19,399,386	$25,374,959	$236,932,001
Office of Administration	$4,600,000	$0	$1,150,000	$0	$5,750,000
Office of Administration	$1,973,382	$0	$493,346	$0	$2,466,728
SUBTOTAL Office of Administration	$6,573,382	$0	$1,643,346	$0	$8,216,728
SUBTOTAL ALL *MOBroadbandNow* projects	$155,205,189	$43,525,849	$21,042,732	$25,374,959	$245,148,729
OTHER MISSOURI AWARDS					
Grand River Mutual Telephone Corporation - Area 1 (Lathrop, MO)	$7,976,924	$3,418,682	$0	$0	$11,395,606
Grand River Mutual Telephone Corporation - Area 2 (Sullivan/Linn counties)	$12,363,759	$0	$0	$0	$12,363,759
Grand River Mutual Telephone Corporation - Area 3 (Worth/Gentry/Harrison counties)	$8,970,781	$0	$0	$0	$8,970,781
Grand River Mutual Telephone Corporation - Area 5 (Powersville, MO)**	$647,046	$277,305	$0	$0	$924,351
Northeast Missouri Rural Telephone Company	$3,595,810	$3,595,810	$0	$0	$7,191,620
Northeast Missouri Rural Telephone Company (Unionville)	$5,140,458	$5,140,458	$0	$0	$10,280,916
Orchard Farm Telephone Co.	$604,794	$0	$201,598	$0	$806,392
Utopian Wireless	$187,298	$62,433	$0	$0	$249,731
Windstream Corporation	$10,328,319	$0	$3,442,774	$0	$13,771,093
SUBTOTAL Other Missouri Awards	$49,815,189	$12,494,688	$3,644,372	$0	$65,954,249
GRAND TOTAL - ROUND 1 & ROUND 2	**$205,020,378**	**$56,020,537**	**$24,687,104**	**$25,374,959**	**$311,102,978**
** Only the Powersville, MO cost is shown of this $20.3 million award that also includes four towns in Iowa.					

National Digital States Survey

Missouri Receives a B+

In 2010, Missouri was nationally recognized as a leader in the area of technology-savvy governments. The Center for Digital Government released its *2010 Digital States Survey*, showing Missouri received one of the top grades among the states for demonstrating technology best practices. Only four states received an A, with Missouri and eight other states receiving a B+. In addition, Missouri was ranked fourth in the nation in the Commerce, Labor and Tax category of the survey. The previous survey conducted in 2008, placed Missouri 24th among the states. For the first time this year, the Center for Digital Government replaced linear rankings with letter grades for all 50 states.

The biennial survey is a comprehensive study that examines best practices, policies and progress made by state governments in their use of digital technologies to better serve their citizens and streamline operations. The survey is conducted over several months in even-numbered years, and the awards are presented during the National Association of State Chief Information Officers (NASCIO) annual conference.

DIGITAL STATES SURVEY

Under Gov. Nixon's leadership, the state's overall information technology system has undergone an unprecedented overhaul. Improvements and upgrades across state government include consolidation and collaboration of information technology services, which improves process efficiency; and the redesign and improved functionality of Mo.gov, the state website, making it easier to access online data and information. In addition, the introduction of social media has increased the state's ability to engage internal and external customers.

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http://go.usa.gov/CYl

Network & Telecommunications

Unified Communications Initiative

Missouri currently supports four independent communication networks – data, voice, mobility and video, with costs associated with managing these separate networks. In response to Governor Nixon's call for a smarter, more efficient state government, ITSD launched Unified Communications (UC) in August 2010. Rollout of the system across the consolidated agencies will occur through summer 2011.

UC will create one unified and modern network covering data, voice, security, wireless and other systems, which will help lower operating costs. UC will also refresh the network infrastructure and upgrade capacity, allowing for more citizen-centric interaction, delivery of better service, and responsiveness to the public.

In addition to cost savings for Missouri taxpayers over the lifespan of the new equipment, the benefits of UC to state workers and the customers they serve will be increased productivity, greater collaboration across state agencies and between organizations, and reduced travel time and expenses. For example, UC will allow state employees to access real-time communication services such as instant-messaging, IP telephony, and video conferencing. Similarly, employees will be accessible via several modes of communication devices from any work location or venue.

The success of UC already has been demonstrated in Missouri state government by some 6,800 users at the Missouri Department of Transportation, the Missouri State Highway Patrol, and the Missouri Department of Conservation.

See the **adjacent chart** for core UC benefits.

According to a national survey of UC users, the core benefits of UC include:

Increased Productivity

· 60% of users save 20 minutes per employee daily, by reaching workers on the first try

· 46% of users realize travel savings of more than five days per employee annually (via Telepresence)

· 50% of users save 20 minutes per employee daily from more efficient message management

· More than 75% experienced improved productivity of employees across geographically-dispersed locations due to voice and video-conferencing

· In a recent global survey of frequent users of telepresence or videoconferencing solutions, 90% cite video collaboration technologies save them at least two hours of valuable work time a week

· In addition, one-third respondents estimate they save close to one full day -- seven hours or more - per week. That adds up to more than two months of time a single employee can gain back over the course of a year

Green Benefits

· Reduced travel for meetings/trainings across the state

· Potential for reduced office space

Real-Time

· Citizen and business-centric instantaneous interactions

· Allows state employees to access real-time information any time, any place, from a variety of devices integrated into one communications system

Online Services and Web

Citizen Engagement and Participation

In an effort to increase online citizen engagement and participation, interactive tools such as videos, timely news, feature stories, and other social media sites were strategically placed on Mo.Gov, as well as other agency web portals. Likewise, ITSD truly embraced and integrated interactive social media into the mainstream of effective IT solutions in 2010. The following communication forums are a sample of the enhanced social mediums being successfully utilized throughout state government:

- · Blogs
- · Facebook
- · Flickr
- · RSS Feeds
- · Twitter
- · Wikis
- · YouTube

In essence, these additional communication venues provide more touch points to effectively engage citizens and learn more about their comments and concerns, as well as provide a forum for them to learn more about government.

eGovernment

ITSD's concerted efforts on the eGovernment technology front is also adding value to existing web sites. The conversion of manual and paper processes to streamlined online electronic forms, applications, and data sets are being continuingly assessed and explored for viability in highly requested daily state government operations and citizen services. A few related projects in 2010, included:

· **Elementary & Secondary Education**
Teacher Certification - allows online teacher applications and certifications replacing the extensive paper processes necessary to license a teacher. 2010 saw the implementation of the Substitute Certification module, allowing substitute teachers to apply online for certification. Background checks, transcripts, and substitute teaching certificates can now be obtained through the online process. The project is currently addressing the initial application for new teaching graduates. Colleges and universities will soon be able to make online applications for their upcoming education graduates, as well as provide the department with transcripts electronically.

· **Health and Senior Services**
Immunization Registry - allows connectivity from any personal computer (with proper security protocols) and for greater utilization from hospitals, clinics, physicians, county health officials, and school nurses.

On-line Birth and Death Registration - allows new birth data input from any personal computer (with proper security protocols). This will allow greater usage of the data from hospitals, clinics, physicians, and county health officials. The death registration system will allow funeral homes to provide direct input of data, doctor confirmation, and automated electronic reporting to the Social Security Administration for survivor benefit entitlements, or cessation of benefits.

Top 2010 Statewide Accomplishments

Online Services and Web

eGovernment cont...

· **Insurance, Financial Institutions & Professional Registration**

Professional Licensing Boards – allows for more effective and efficient board and member (39 boards with 228 members) communications, and preparation for various board activities such as meetings, conference calls, and paperless agendas.

· **Labor**

Unemployment Benefit Calculators – allows users to estimate the unemployment benefit they should expect to receive.

Discrimination Complaint Assessments – allows users to self assess their situation to see if they should file a complaint of discrimination.

Are You Covered? – allows users to see if they are covered by worker's compensation.

Debarment List – allows users to search contractors debarred from public projects.

· **Public Safety**

Liquor License Renewal System – allows businesses the capability of renewing their licenses online instead of having to wait for a renewal letter to come thru the mail.

Property Inventory System – allows the tracking of the acquisition and disbursement of surplus military equipment through the Department of Defense (DOD Program). This program provides excess military equipment that is not needed by DOD, and is given to state and local civilian law enforcement agencies for use in counter-narcotic, counter terrorism operations and officer safety. This system was developed to allow better tracking, reporting capabilities and

· **Revenue**

Business Tax Online Credit Inquiry System – allows business owners to determine if any overpayments exist on their Missouri sales and/or withholding tax account.

Request for Change of Address – automates the routing of change of address information to the respective areas in Tax, Motor Vehicle, and Driver License offices that handle such requests.

Open Government and Transparency

ITSD continues to illustrate its commitment to increasing the openness and transparency of government, by leading and working on a plethora of web and application projects that reflect this philosophy. The following are a sample of such projects:

· **Capitol Events Calendar** hosted via the Office of Administration website
· **Laboratory Information Management System** (**LIMS**) **Water Sampling Database** via the Department of Natural Resources website
· **Open Meetings Calendar** via Mo.Gov
· **State Data Sets** via Mo.Gov
· **State Parks Beach Closings** via the Department of Natural Resources website
· **Tax Credit Review Commission (TCRC)** via the Missouri TCRC website
· **Transform.Gov is host to the Missouri Accountability Portal (MAP),** including the point-of-entry for showcasing all American Recovery and Reinvestment Act (ARRA) related federal stimulus funds, projects and status

Top 2010 Statewide Accomplishments

Online Services and Web cont...

Open-Source Content Management Systems

In order to be more efficient and productive in 2010 and beyond, ITSD increased the use of open-source content management systems like Drupal and Wordpress. In addition, low-cost or free content delivery platforms like Flickr and YouTube were utilized more frequently.

At-A-Glance ~ Website Redesigns

In 2010, several executive departments' websites were redeveloped and redesigned to improve usability, including:

· **Office of Administration**
· **Department of Labor and Industrial Relations**
· **Department of Mental Health**
· **Department of Natural Resources**
· **Department of Revenue**
· **Department of Social Services**

The new websites are more citizen-friendly and include additional online services.

Special Initiatives

In addition to offering more traditional government services online, other special web portals were also created and developed to benefit citizens. As a joint project supported by the Missouri Civil War Sesquicentennial Commission, Missouri Tourism Division, and the Missouri Department of Natural Resources, the **Missouri Civil War Sesquicentennial** web site was one such example. As Missouri commemorates the sesquicentennial of the Civil War this year, citizens may now learn more about Missouri's historic role in the Civil War. (Web portal: http://mocivilwar150.com). Other special projects included:

· **Children In Nature Challenge**
    http://www.childreninnature.mo.gov
· **State Parks Youth Corps (SPYC)**
    https://thinkoutside.mo.gov/default.aspx
· **Trout Cam**
    http://mostateparks.com/bennett/troutcam.htm

Power Management

ITSD implemented a power management plan for consolidated agencies. Currently, workstations reporting to the server with power management options is approximately 11,200. With 11,200 workstations transferred to a "hibernation" mode at 7:00 PM each evening, ITSD is saving an estimated $2,240 per month on power consumption. In 2011, a statewide implementation plan will be rolled out to increase savings on this front.

Professional Development

In an effort to improve ITSD end-user support (EUS) services to all customers, nearly 325 IT EUS and helpdesk staff were required to participate in *EUS Customer Service* training. Seven three-hour face-to-face training sessions and two live interactive webinars were hosted during summer 2010.

Although this topic is certainly not new, it reinforces ITSD's vision and values of delivering exceptional customer service at all times, with all customers, and across various forums of communication - such as the online helpdesk system, email, telephone, and face-to-face meetings. Moreover, the online live webinar training was highly accepted by out-state staff, who expressed their appreciation for the new and flexible training format, as they often opt out of any out-of-town meetings due to travel constraints, tight budgets, and difficulty ensuring adequate onsite IT coverage.

State Data Center
Consolidation and Virtualization

In 2010, the State Data Center consolidation and virtualization initiative continued from last year, but saw integration efforts in support of eight separate State agencies as they migrated from numerous divergent technologies residing in discrete silos into sustainable, standardized servers integrated into the secure environment of the central State Data Center. Eight agencies saw more than 500 servers migrated. Although difficult to detail the collective changes and impacts within the context of this report, it is possible to look at one agency as an example of the benefits of such an expansive initiative.

With ITSD's vision and leadership, Natural Resources consolidated 60 servers down to five servers. This migration represents a huge improvement in efficiency, and an equally significant reduction in the cost of hardware, software and personnel, as each server had to be individually administered, supported, and funded (licensing, maintenance, etc.).

Moreover, such migrations also contribute to the State's Green initiatives, as the Natural Resources effort brought about an overwhelming reduction in energy consumption. Each server consumed an average of about 200 watts, resulting in a collective consumption of almost 60,000 watts of power. The five new servers also consume about 200 watts each, but that means that the power consumption is now only about 1,000 watts, representing an ongoing savings of energy (and the cost of that energy) and reflects the environmental awareness of this administration.

Likewise, the staffing effort required to provide server administration and support in the consolidated environment is greatly reduced, and the costs of hardware maintenance and software licensing are also reduced dramatically. As future consolidations transpire, economies of scale will bring about reductions in the cost of storage (i.e. discrete servers with dedicated storage inherently make inefficient use of disk storage – the new environment permits greater efficiency). The discrete servers in Natural Resources' case, represented more than 44,000 GB of disk space, with only a little under 20,000 of that actually being utilized. Thus, by migrating Natural Resources' physical servers to the virtual server environment within the State Data Center, an annual cost avoidance of $367,671 is realized.

Top 2010 Statewide Accomplishments

State Data Center

Consolidation and Virtualization cont...

As significant as the progress on this effort was in 2010, more remains to be accomplished. Of the eight agencies involved in the 2010 migrations, only a few are completed to date– the remaining agencies still have devices which are planned for consolidation during 2011. At least five agencies will be included in the 2011 effort, representing hundreds of discrete servers that will require consolidation into the central State Data Center environment.

Email Migration into Statewide Exchange Server

During early 2010, Natural Resources was consolidated from a stand alone, agency-specific Lotus Notes/Domino email implementation system to the State of Missouri's consolidated Exchange Server e-mail and archiving system.

This effort required that 1,800 mailboxes for the agency be moved to complete this consolidation. This resulted in a cost savings of approximately $133,000. This savings was realized by eliminating Lotus Notes software maintenance and support, and the elimination of an e-mail gateway (which included hardware and software costs).

Additionally, as with all such consolidation efforts, there was also a corresponding reduction in the staffing necessary to support this function, as well as a corresponding improvement in service as a benefit of a shared email environment and the greater efficiency that provides. By bringing this agency into the consolidated environment, it also ensured more complete compliance with various public information mandates by enabling the State's email archival solution to transparently incorporate a more complete record of email communications.

Statewide Project Management Office (PMO)

Mirroring a nationwide trend, a central Project Management Office (PMO) was newly formed in 2010, in response to a need to help establish a more formal statewide project management structure and system to manage enterprise-wide and individual agency IT projects alike. Not only will this allow for greater collaboration among government agencies, but it will provide greater visibility and transparency into IT operations, and will ultimately play a vital role in helping state government perform better and deliver citizen services more effectively and efficiently. The PMO will assist in aligning the department needs with the IT resources and priorities.

2011 will bring the continued implementation and enhancement of 2010 top statewide initiatives. Additionally, a small sample of planned agency projects for 2011 are showcased below.

Agriculture

Animal Care Facilities Act Program (ACFA)

In 2011, Agriculture will roll out Animal Health's Animal Care Facilities Act Program (ACFA) modernization project, which will house all license, registration and inspection records on a more modern data platform and include system enhancements. Enhancements will increase the efficiency of data synchronization and will allow field staff to track and share investigation data electronically.

Conservation

Time, Activity, Location, Online Notebook (TALON)

TALON is a web-based application developed to track time and activities by Conservation employees on both public and private lands. It also features a mapping component which staff can map areas where resource management efforts occurred. This application provides one source of information allowing the agency to report on management practices conducted on various lands over time.

This will provide useful information in decision making by showing total efforts across divisions on a particular piece of land.

The contacts system is an integrated system that will track individuals and organizations who consume agency services. By merging all contacts into one system, Conservation will be able to realize cost savings through bulk mailing address validation. This will also allow greater ease for the public to change mailing addresses or other contact information. In FY11, the contacts system will be integrated into the TALON system and magazine subscription system. In the future, more services will be integrated to use the contacts system.

Corrections

Offender Management System (OPII)

Corrections will continue work on a number of projects to replace portions of the Offender Management System (OPII). The current OPII system has been in production since 1998 and was developed using green-screen technology which is becoming obsolete and costly to maintain.

This development effort is in conjunction with other states as part of the National Consortium of Offender Management Systems (NCOMS). The department will have the opportunity to realize greater efficiency by building on existing code that has already been developed by other states. Efforts will be focused on modules utilized by the Division of Probation and Parole, the Division of Adult Institutions and the Division of Rehabilitative Services such as: healthcare, caseload management, housing/security/scheduling, classification, discipline, release/discharge/PPBOARD, field supervision and visitation management and will feature an online visiting application so that potential visitors can apply to visit incarcerated family and friends via the internet.

Highlight of 2011 Planned Department Projects

Economic Development

MissouriCareerSource.com (MCS)

Economic Development will launch the new MissouriCareer Source.com (MCS) in early 2011. This release will become Workforce Development's web portal and will provide a foundation on which to develop future features for Missouri's workforce. Throughout 2011 new features will be added, including:

· An improved job search engine that will allow job postings from other providers to be shown. This will allow the number of searchable postings to increase by more than 700 percent.

· Dynamically driven pages that will allow Workforce Development staff to update content (e.g. articles, notices, guides, and events happening at career centers) via site administration pages. This will reduce the involvement of ITSD staff, and greatly reduce the time it takes to get information to the public.

Elementary & Secondary Education

Application and Software Infrastructure Modernization

Critical to the department's IT software infrastructure is the need to move existing applications from the Oracle database environment to a SQL database environment. This will allow for a substantial savings each year in maintenance and support. Also planned in 2011 is a rewrite of the EDEN/ED Facts reporting system to create an application that will allow users to maintain, create and view required federal reports prior to submission. An application to determine Highly Qualified Teachers (HQT) and Inappropriate Certifications will also be created to enhance the functionality of the Teacher Certification System.

Higher Education

Financial Assistance for Missouri Undergraduate Students (FAMOUS) Application

The Financial Assistance for Missouri Undergraduate Students (FAMOUS) application, is a key application for Higher Education. The department's primary goal for 2011 is to test and deploy the application into production by August 2011. This will include many enhancements to the system and allow users to be more efficient in their duties and allow them to focus on other duties.

Highway Patrol

Disaster Recovery Operation

During 2010, the Patrol engaged in a joint disaster recovery operation with the Missouri Department of Transportation. Data circuits were installed and tested. In the upcoming year, the Patrol expects to install equipment and establish a fully operational host site at the new location. This will involve extensive testing and dry runs to validate the backup capabilities and certify that the contingency plans will work as desired.

Insurance, Financial Intuitions & Professional Registration

Online Complaint Verification

This project will provide insurance companies access to review and approve/dispute the recorded consumer complaint data against the company utilizing a convenient, but secure, web-based system. While the Consumer Affairs Division anticipates some cost savings, the chief benefits will be a significant reduction in the verification time and data quality improvement afforded by the on-line application compared to the current manual review process. Ultimately, this will put better decision-making information into the hands of consumers much quicker.

Highlight of 2011 Planned Department Projects

Labor & Industrial Relations
Modernization and Paperless Conversion
In 2011, DOLIR will start to roll out the Division of Workers' Compensation Modernization (DWCM) project, which will:

· Convert 90 percent of record searches to an electronic format;
· Reduce paper printouts by 55 percent;
· Allow for 70 percent of all case requests to be handled in a 24-hour period; and
· Allow 95 percent of self-insurance applications to be made electronically.

Likewise, it is estimated that a similar project, Unemployment Insurance Modernization (UIM), will:

· Reduce mail costs by 65 percent;
· Decrease paper usage by 75 percent;
· Reduce returned mail by 80 percent;
· Reduce claims processing time by 50 percent; and
· Reduce contribution wage report processing by 80 percent.

Mental Health
Health, Insurance, Portability, & Accountability Act (HIPPA)
In 2011, as required, the conversion and upgrade to the new HIPPA system (ICD-9 to ICD-10) is a major challenge to all payers and providers of Health Care Services – impacting public and private sectors, and requiring changes to all aspects of Health Care business areas.

The implementation of the new HIPPA system has a major impact on Mental Health, Mental Health business partners and Mental Health payers.

Although mandated, the conversion is not federally funded, with projected costs of $6 billion dollars to fully implement nationwide. Nonetheless, Missouri Mental Health, due to flexibility of the Customer Information Management, Outcomes and Reporting (CIMOR) system architecture and interfaces, will be able to accommodate these new changes without any additional funding.

Natural Resources
Parks 2020
In 2011, Natural Resources will roll out a new centralized web-based attendance reporting system for its Missouri States Parks program. This will improve attendance reporting from a month lag to a weekly report in a consistent manner, and will provide the Parks Director and team with vital information related to parks attendance. Likewise, during Phase 2 of this initiative in 2011, Natural Resources will roll out a new centralized revenue component. This system will be the only revenue processing component. By centralizing these tasks the Parks Director and team will be empowered to see real-time revenue transactions related to Missouri State Parks.

Public Safety
Web-Based Emergency Response Application
In 2011, Public Safety will implement an electronic web-based Emergency Response Application for the State Emergency Management Agency to easily access up-to-date situation reports submitted by all jurisdictions throughout the state of Missouri during times of disasters. This application will be developed in-house using existing resources to minimize cost

Highlight of 2011 Planned Department Projects

Public Safety

Web-Based Emergency Response Application cont...

in the development. This application will allow for the State Emergency Operations Center to be able to review and consolidate reports and better prepare summaries on disaster updates in different locations throughout the state for senior leadership, in a more timely manner.

Revenue

Electronic Driver License Application Modernization

Revenue will focus on a rewrite and modernization project to update and modernize the Missouri Electronic Driver License application used in the contract office. This is in an effort to eliminate dependency on contractor staff, reduce costs, enable the system to be more flexible relating to future modifications, and ease the maintenance from both a software and hardware perspective The processes put in place with this project can then become the basis for future development.

Social Services

Online Managed Care Application

Social Services is currently developing an application that will allow Missouri's 400,000 Managed Care participants to choose their insurance plan and primary care physician over the Internet. The application will eliminate the process of printing and mailing plan information for those participants that choose the on-line process when they are approved for Medicaid. It also will reduce the burden on the print vendor that creates packets, Managed Care participant support staff and the MO HealthNet Division during annual enrollment when the entire population is required to choose a plan during the course of one month.

State Treasurer's Office

Unclaimed Property KIOSK

The State Treasurer's Office is developing an Unclaimed Property KIOSK system for use in licensing and registration fee offices in Missouri. The KIOSK will allow the public to search for Unclaimed Property and sign up for e-mail notification. The office will have the ability to edit pages locally so that the need to travel to the KIOSK is reduced. The purpose of the KIOSK is to promote Unclaimed Property and return it to Missourians.

Transportation

Automated Fuel Management System

The Fuel Management System will provide MoDOT with an automated system that is paperless and accounts for all fuel transactions. The system will collect data and electronically transmit fuel transactions to SAM II for inventory, and to the Fleet System for tracking purposes. All bulk fuel sites, roughly 300 statewide, will be automated during this project.

2010
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Information Technology Report

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